

Trade and Industrial Education

School Year _____

Course: Automotive: Suspension and Steering**Course Code # 5710****1 Credit**

Term: ____ Fall ____ Spring

Student:	Grade:
Teacher:	School:
Number of Competencies in Course: 41	
Number of Competencies Mastered:	
Percent of Competencies Mastered:	

STANDARD 1.0: Students will demonstrate leadership, citizenship, and teamwork skills required for success in the school, community, and workplace.

Learning Expectations		Check the appropriate Mastery or Non-Mastery column	Mastery	Non-Mastery
1.1	Develop a plan for self-improvement.			
1.2	Participate in SkillsUSA-VICA as an integral part of classroom instruction.			
1.3	Assess client expectations.			
1.4	Develop a working relationship with a mentor.			

STANDARD 2.0: Students will demonstrate automotive technology safety practices, including Occupational Safety and Health Administration (OSHA) and Environmental Protection Agency (EPA) requirements for an automotive repair facility.

Learning Expectations		Check the appropriate Mastery or Non-Mastery column	Mastery	Non-Mastery
2.1	Comply with personal and environmental safety practices.			
2.2	Use protective clothing and safety equipment used in suspension and steering servicing.			
2.3	Use fire protection equipment.			
2.4	Follow OSHA and EPA regulations affecting suspension and steering service technology.			
2.5	Respond to safety communications referring to suspension and steering issues.			
2.6	Pass with 100 % accuracy a written examination relating to safety issues.			
2.7	Pass with 100% accuracy a performance examination relating to safety.			
2.8	Maintain a portfolio record of written safety examinations and equipment examinations for which the student has passed an operational checkout by the instructor.			

STANDARD 3.0: Students will apply fundamental science concepts to automotive suspension and steering systems technology.

Learning Expectations		Check the appropriate Mastery or Non-Mastery column	Mastery	Non-Mastery
3.1	Examine how physics concepts apply to automotive suspension and steering system operation.			
3.2	Explore the application of fundamental laws of hydraulics to automotive suspension and steering systems.			
3.3	Analyze the characteristics and properties of liquids as applied to automotive suspension and steering system technology.			

STANDARD 4.0: Students will properly test, diagnose, service, and repair automotive steering systems.

Learning Expectations		Check the appropriate Mastery or Non-Mastery column	Mastery	Non-Mastery
4.1	Diagnose steering systems and determine necessary action.			
4.2	Clean, inspect, reassemble, adjust, and install power and manual steering gear boxes.			
4.3	Clean, inspect, reassemble, adjust, and install power and manual rack and pinion steering rack.			
4.4	Inspect and repair steering columns.			
4.5	Inspect and replace steering linkage components.			
4.6	Inspect, repair, and replace power steering pumps.			

STANDARD 5.0: Students will properly test, diagnose, service, and repair automotive front suspension systems.

Learning Expectations		Check the appropriate Mastery or Non-Mastery column	Mastery	Non-Mastery
5.1	Diagnose conventional and electronic front suspension systems and determine necessary action.			
5.2	Inspect and repair control arm and spring assemblies on conventional systems.			
5.3	Inspect and repair wheel spindles and bearings.			
5.4	Inspect and replace shock absorbers and stabilizer bars.			
5.5	Diagnose MacPherson strut assemblies and determine necessary action.			
5.6	Clean, inspect, and assemble MacPherson strut assemblies.			

STANDARD 6.0: Students will properly test, diagnose, service, and repair automotive rear suspension systems.

Learning Expectations		Check the appropriate Mastery or Non-Mastery column	Mastery	Non-Mastery
6.1	Inspect and diagnose conventional and electronic rear suspension systems and components and determine necessary action.			
6.2	Repair or replace rear suspension system components.			

STANDARD 7.0: Students will use proper equipment and procedures to set front and rear wheel alignment angles.

Learning Expectations		Check the appropriate Mastery or Non-Mastery column	Mastery	Non-Mastery
7.1	Diagnose steering and tire wear problems and determine necessary action.			
7.2	Set correct alignment angles on front wheels.			
7.3	Set correct camber and toe on rear wheels.			
7.4	Rotate and balance tire and wheel assemblies.			

STANDARD 8.0: Students will demonstrate communication skills required in the automotive service industry.

Learning Expectations		Check the appropriate Mastery or Non-Mastery column	Mastery	Non-Mastery
8.1	Communicate and comprehend oral and written information typically occurring in automotive suspension and steering diagnosis and repair.			
8.2	Solve suspension and steering problems and make decisions using a logical process.			
8.3	Use teamwork skills to accomplish goals, solve problems, and manage conflict within groups.			

STANDARD 9.0: Students will demonstrate interpersonal and employability skills required in the automotive service industry

Learning Expectations		Check the appropriate Mastery or Non-Mastery column	Mastery	Non-Mastery
9.1	Infer relationships between work ethics and organizational and personal job success.			
9.2	Develops customer service skills.			
9.3	Maintain a neat and orderly work area.			
9.4	Assess implications of diversity for communities and workplaces.			
9.5	Explore supervisory and management roles in the dealership or fleetshop.			

Additional Comments _____